

CLAIMS

What is claimed is:

1. An air freshener device, comprising:

a) a coherent elastomeric polymer body; and

b) a scent material, interspersed within the body, capable of diffusing out of the body to surrounding air.

2. A device in accordance with claim 1, wherein the polymer body further has a freestanding, self-supported, three-dimensional shape.

3. A device in accordance with claim 1, further comprising:

a tacky attachment surface, associated with the polymer body, configured to contact and cling to a support surface by mechanical or specific adhesion.

4. A device in accordance with claim 1, further comprising:

a pad, carrying the polymer body, configured to be disposable between the polymer body and a support surface, and having a tacky attachment surface configured to cling to the support surface.

5. A device in accordance with claim 4, further comprising:

a barrier, disposed between the polymer body and the pad, being smaller than the polymer body and the pad such that a perimeter of the polymer body contacts a perimeter of the pad.

6. A device in accordance with claim 4, wherein the pad is flexible and can be deformed to conform to a shape of a support surface.

7. A device in accordance with claim 4, further comprising:

indicia, disposed between the polymer body and the pad; and

the polymer body being light transmissive in at least a translucent manner such that the indicia is visible through the polymer body.

8. A device in accordance with claim 1, wherein the polymer body includes a polymeric material with a glass transition temperature greater than approximately 110 °F.

9. A device in accordance with claim 1, wherein the elastomeric polymer is a member selected from the group consisting of polyurethane, polyacrylate, polybutadiene, ethylene propylene elastomer, silicone, natural rubber, synthetic rubber, styrene/butadiene block copolymer, polyvinylchloride, ethylene vinyl acetate, polypropylene, ethylene/methacrylic acid copolymer, and mixtures thereof.

10. A device in accordance with claim 9, wherein the elastomeric polymer is a member selected from the group consisting of polyurethane, polyacrylate, polybutadiene, ethylene propylene elastomer, styrene/butadiene block copolymer, and mixtures thereof.

11. A device in accordance with claim 1, wherein the elastomeric polymer is a thermoplastic elastomer.

12. A device in accordance with claim 11, wherein the thermoplastic elastomer is selected from the group consisting of polyurethanes, polyamides, copolyesters, and styrene-butadiene-styrene polymers, elastomer/thermoplastic blends, and combinations thereof.

13. A device in accordance with claim 1, wherein the polymer body includes polyurethane and the scent material includes a scented oil.

14. A device in accordance with claim 1, wherein the polymer body is a polymerization product of at least a diisocyanate prepolymer and a scented oil.

15. A device in accordance with claim 14, wherein the polymer body and scent material includes a polymerization product of:

- a) a polyether polyol;
- b) a diphenylmethane diisocyanate (MDI) prepolymer; and
- c) a scented oil.

16. A device in accordance with claim 1, further comprising:
a plurality of indentations or protrusions formed in the polymer body.

17. A device in accordance with claim 1, wherein the scent material in the polymer body disperses at a substantially constant rate for at least a time period of between approximately two days and thirty days.

5 18. A device in accordance with claim 1, wherein the polymer body is light transmissive in at least a translucent manner.

19. A device in accordance with claim 1, further comprising:

10 a hanger, coupled to the polymer body, with the polymer body suspended from the hanger.

20. A device in accordance with claim 1, further comprising:

 a rigid tray, with the polymer body disposed thereon; and

15 a button, coupled to the tray with the polymer body held between the tray and the button.

21. An air freshener device, comprising:

 a) a thermoplastic elastomer having a freestanding, self-supported, three-dimensional shape; and

20 b) a scent material, interspersed within the thermoplastic elastomer, capable of diffusing out of the thermoplastic elastomer to surrounding air.

22. A device in accordance with claim 21, wherein the thermoplastic elastomer is formed of a polymeric material having a glass transition temperature greater than approximately 25 110 °F.

23. A device in accordance with claim 21, wherein the thermoplastic elastomer is selected from the group consisting of polyurethanes, polyamides, copolyesters, and styrene-butadiene-styrene polymers, elastomer/thermoplastic blends, and combinations thereof.

30 24. A device in accordance with claim 21, wherein the thermoplastic elastomer is polyurethane.

25. A device in accordance with claim 21, wherein the thermoplastic elastomer includes a polyurethane material and the scent material includes a scented oil.

5 26. A device in accordance with claim 21, wherein the thermoplastic elastomer and scented oil includes a polymerization product of:

- a) a polyether polyol;
- b) a diphenylmethane diisocyanate (MDI) prepolymer; and
- c) a scented oil.

10 27. A device in accordance with claim 21, further comprising:
a tacky attachment surface, associated with the thermoplastic elastomer,
configured to contact and cling to a support surface by mechanical or specific adhesion.

15 28. A device in accordance with claim 21, further comprising:
a pad, carrying the thermoplastic elastomer, configured to be disposable between
the thermoplastic elastomer and a support surface, and having a tacky attachment surface
configured to cling to the support surface.

20 29. A device in accordance with claim 28, further comprising:
a barrier, disposed between the thermoplastic elastomer and the pad, being
smaller than the thermoplastic elastomer and pad such that a perimeter of the
thermoplastic elastomer contacts a perimeter of the pad.

25 30. A device in accordance with claim 28, wherein the pad is flexible and can be
deformed to conform to a shape of a support surface.

30 31. A device in accordance with claim 28, further comprising:
indicia, disposed between the thermoplastic elastomer and the pad; and
the thermoplastic elastomer being light transmissive in at least a translucent
manner such that the indicia is visible through the thermoplastic elastomer.

32. A device in accordance with claim 21, further comprising:
a plurality of indentations or protrusions formed in the thermoplastic elastomer.

33. A device in accordance with claim 21, wherein the scent material in the thermoplastic elastomer disperses at a substantially constant rate for at least a time period of between approximately two days and thirty days.

5 34. A device in accordance with claim 21, wherein the thermoplastic elastomer is light transmissive in at least a translucent manner.

35. A device in accordance with claim 21, further comprising:

10 a hanger, coupled to the thermoplastic elastomer, with the thermoplastic elastomer suspended from the hanger.

36. A device in accordance with claim 21, further comprising:

15 a rigid tray, with the thermoplastic elastomer disposed thereon; and
 a button, coupled to the tray with the thermoplastic elastomer held between the tray and the button.

37. An air freshener device, comprising:

20 a) a pad with a tacky attachment surface configured to contact and cling to a support surface;

 b) a polymer carrier material, coupled to the pad, that is flexible and compressible under an applied force, and resilient and substantially returnable to an original configuration upon removal of the applied force; and

25 c) a scent material, interspersed within the polymer carrier material, capable of diffusing out of the polymer carrier material to surrounding air.

38. A device in accordance with claim 37, wherein the tacky attachment surface clings to a support surface by mechanical or specific adhesion.

30 39. A device in accordance with claim 37, wherein the polymer carrier material further has a freestanding, self-supported, three-dimensional shape.

40. A device in accordance with claim 37, further comprising:

a barrier, disposed between the polymer carrier material and the pad, being smaller than the polymer carrier material and the pad such that a perimeter of the polymer carrier material contacts a perimeter of the pad.

5 41. A device in accordance with claim 37, wherein the pad is flexible and can be deformed to conform to a shape of a support surface.

42. A device in accordance with claim 37, further comprising:

indicia, disposed between the polymer carrier material and the pad; and

10 the polymer polymer carrier material being light transmissive in at least a translucent manner such that the indicia is visible through the polymer carrier material.

43. A device in accordance with claim 37, wherein the polymer carrier material includes a polymeric material having a glass transition temperature greater than approximately 110 °F.

15 44. A device in accordance with claim 37, wherein the polymer carrier material is an elastomeric polymer.

20 45. A device in accordance with claim 44, wherein the elastomeric polymer is a thermoplastic elastomer.

25 46. A device in accordance with claim 45, wherein the thermoplastic elastomer is selected from the group consisting of polyurethanes, polyamides, copolyesters, and styrene-butadiene-styrene polymers, elastomer/thermoplastic blends, and combinations thereof.

47. A device in accordance with claim 37, wherein the polymer carrier body includes a polyurethane material and the scent material includes a scented oil.

30 48. A device in accordance with claim 37, wherein the polymer carrier material and scented oil includes a polymerization product of:

a) a polyether polyol;

b) a diphenylmethane diisocyanate (MDI) prepolymer; and

c) a scented oil.

49. A device in accordance with claim 37, further comprising:
a plurality of indentations or protrusions formed in the polymer carrier material.

5 50. A device in accordance with claim 37, wherein the scent material in the polymer carrier material disperses at a substantially constant rate for at least a time period of between approximately two days and thirty days.

51. A device in accordance with claim 37, wherein the polymer carrier material is light transmissive in at least a translucent manner.

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52. A method for providing a desired fragrance, comprising the steps of:

a) securing a tacky attachment surface of a pad of an air freshener to a surface by mechanical or specific adhesion, the air freshener including a scent material carried by and dispersable through a coherent, flexible and resilient polymer carrier material; and

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b) selectively removing the pad from the surface.

53. A method in accordance with claim 52, further comprising the step of:
selectively re-securing the pad at a different position on the surface.

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54. A method in accordance with claim 52, further comprising the step of:
deforming the polymer carrier material, the polymer carrier material being resilient and substantially returnable to an original configuration.

25 55. A method in accordance with claim 52, wherein the polymer carrier material includes a polyurethane gel and the scent material includes a scented oil.

56. A method in accordance with claim 52, wherein the polymer carrier material includes a polymeric material having a glass transition temperature greater than approximately 110 °F.

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57. A method in accordance with claim 52, wherein the scent material disperses at a substantially constant rate for at least a time period of between approximately two days and thirty days.

58. An air freshener device, comprising:

a) a polymer gel formed of a thermoplastic elastomer having a glass transition temperature greater than approximately 110 °F; and

b) a scent material, interspersed within the polymer gel, capable of diffusing out of the polymer gel to surrounding air.

59. A device in accordance with claim 58, wherein the thermoplastic elastomer is a polymerization product of a polyether or polyester polyol, a diphenylmethane diisocyanate (MDI) prepolymer, and a scented oil.